Applicant: Robert A. Rabiner et al. Attorney's Docket No.: 18554-036001

Serial No. : 10/774,898 Filed : February 9, 2004

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Amendments to the Specification:

Please replace the paragraph beginning at page 15, line 6 with the following amended paragraph:

The torsional vibration of the ultrasonic probe 15 in FIG. 4 and FIG. 5A is shown as movement of the ultrasonic probe in alternating clockwise and counterclockwise directions along the longitudinal axis of the ultrasonic probe 15. The torsional vibration shown in FIG. 4 and FIG. 5A is a torsional oscillation whereby equally spaced points along the longitudinal axis of the ultrasonic probe 15 including the probe tip 9 vibrate back and forth in a short arc of the same amplitude in a plane perpendicular to the longitudinal axis of the ultrasonic probe 15. The vibration creates a plurality of torsional nodes 50 and a plurality of torsional anti-nodes 52 along an active area of the ultrasonic probe 15. A section proximal to each of the plurality of torsional nodes 50 and a section distal to each of the plurality of torsional nodes 50 are vibrated out of phase, with the proximal section vibrated in a clockwise direction and the distal section vibrated in a counterclockwise direction, or vice versa. The torsional vibration produces a rotation and counterrotation along the longitudinal axis of the ultrasonic probe 15. As shown in FIG. 5A and FIG. 5B, the torsional vibration is propagated in a forward direction and a reverse direction about a torsional node 50. Traveling along the longitudinal axis, at each torsional node 50, the direction of the rotation reverses and the amplitude increases until reaching a torsional anti-node 52 and subsequently decreases toward the next torsional node 50. An ultrasonic probe operating in a torsional mode for biological material ablation are described in the Assignee's co-pending patent application U.S. Serial No. 00/000,000 10/774,985, filed February 9, 2004 (Attorney Docket No. 20563/2422), and the entirety of this application is hereby incorporated herein by reference.